

ABSTRACT

An injection molding apparatus comprises a first sprue bar element having a first sprue channel for receiving a melt stream of moldable material under pressure. A second sprue bar element has a second sprue channel for selectively receiving the melt stream from the first sprue channel. A manifold has a manifold channel for receiving the melt stream from the second sprue channel and delivering the melt stream to a nozzle channel of a nozzle. A mold cavity receives the melt stream from the nozzle. The nozzle channel communicates with the mold cavity through a mold gate. A first gate assembly is coupled to an outlet of the first sprue bar element for selectively restricting the flow of the melt stream from the first sprue channel. The first gate assembly is movable to restrict the flow when the flow of the melt stream between the first sprue channel and the second sprue channel is interrupted.